

Amendments to the Claims:

1. (currently amended) A powder blend for use in a laser sintering process comprising:
a steel alloy of about 82.75 percent to about 93.75 percent about 88.75 to about 92.75 percent by weight selected from the group consisting of a mild steel alloy, a carbon steel and a stainless steel;
a polymeric binder from about 1.25 to about 2.25 percent by weight; and
a high melting temperature fine metallic, intermetallic, or ceramic particulate of greater than about 5 percent and less than about 15 percent by weight.
2. (previously presented) The powder blend according to claim 1 wherein the steel alloy ranges in size from less than about 90 microns to about 4 microns.
3. (previously presented) The powder blend according to claim 2 wherein the steel alloy ranges in size from less than about 75 microns to about 8 microns.
4. (previously presented) The powder blend according to claim 2 wherein the steel alloy is less than about 45 microns.
5. (previously presented) The powder blend according to claim 1 wherein the steel alloy is spherical.
6. (previously amended) The powder blend according to claim 2 wherein the high melting temperature fine metallic, intermetallic, or ceramic particulate has a particle size less than about 10 microns.
7. (previously presented) The powder blend according to claim 6 wherein the high melting temperature fine particulate has a particle size less than about 2 microns.

Patent
USA.342-1

8. (previously presented) The powder blend according to claim 7 wherein the high melting temperature fine particulate comprises greater than about 5 weight percent and less than about 15 weight percent of the powder blend.
9. (previously presented) The powder blend according to claim 8 wherein the high melting temperature fine particulate comprises about 8 weight percent of the powder blend.
10. (previously presented) The powder blend according to claim 1 wherein the polymeric binder is a thermoplastic or a thermoset.
11. (previously presented) The powder blend according to claim 1 wherein the polymeric binder is selected from the group consisting of polyethylene, polypropylene, polyacetal, polymethacrylate, polyvinylacetate, nylon, wax, phenolic and combinations thereof.
12. (previously presented) The powder blend according to claim 11 wherein the polymeric binder is nylon.
13. (previously presented) The powder blend according to claim 12 wherein the nylon is one selected from the group consisting of polymers and co-polymers of nylon 6, nylon 9, nylon 10, nylon 11, and nylon 12.
14. (previously presented) The powder blend according to claim 1 further comprising a flow agent.
15. (previously presented) The powder blend according to claim 14 wherein the flow agent is fumed silica.

Claims 16-31 (canceled)

32. (previously presented) The powder blend according to claim 9 wherein the high melting temperature fine particulate is tungsten carbide.

Patent
USA.342-1**Claim 33 (canceled)**

Claim 34 (currently amended) The powder blend according to claim 1 wherein the high melting fine metallic, intermetallic, or ceramic particulate is selected from the group consisting of tungsten, tantalum, hafnium, rhenium, molybdenum, titanium aluminide, silicon carbide, boron, tungsten carbide, boron carbide, alumina and diamond.

Claim 35 (previously presented) The powder blend according to claim 1 wherein the steel alloy is a mild steel alloy.